AMENDMENTS TO THE CLAIMS

Please amend the claims as follows:

1. (Canceled)

2. (Currently amended) The fusion protein ~~An EPO form~~ of claim 28 having ~~1, showing~~ improved biological activity compared to naturally-occurring human erythropoietin.

3. (Currently amended) The ~~A~~ fusion protein of claim 28 ~~1~~ having an extended serum half-life compared to naturally-occurring human erythropoietin.

4. (Currently amended) The ~~A~~ fusion protein of claim 3, wherein said extended serum half-life is greater than 20 hours.

5. (Currently amended) The fusion proteins ~~(iii), (iv), (vi) or (vii)~~ of claim 30 ~~1~~, ~~wherein said fusion proteins~~ having ~~have~~ greater specific activity than the comparable Fc-EPO fusion proteins having no mutations in the EPO portion ~~mutated EPO molecules~~.

6-15. (Canceled)

16. (Currently amended) The ~~A~~ fusion protein of ~~according to~~ claim 30 ~~1, said fusion protein~~ comprising a whole Ig molecule.

17. (Currently amended) The ~~A~~ fusion protein of ~~according to~~ claim 30 ~~1,~~ wherein the ~~Ig molecule~~ Fc portion and the EPO portion ~~molecule~~ are of mammalian origin.

18. (Currently amended) The ~~A~~ fusion protein of ~~according to~~ claim 17, wherein the Fc portion is derived from ~~Ig molecule is~~ human IgG.

19-23. (Canceled)

24. (Currently amended) A pharmaceutical composition comprising the ~~a~~ fusion protein of ~~according to~~ claim 30 ~~1~~ and a pharmaceutically acceptable carrier, diluent or excipient.

25. (Currently amended) The ~~A~~ pharmaceutical composition of claim 24 containing at least one additional pharmaceutically effective drug and / or adjuvants.

26. (Canceled)

27. (Currently amended) The ~~A~~ fusion protein of claim 32 ~~26~~, wherein the EPO portion comprises ~~EPO$_m$ is derived from human EPO and has~~ at least one of the following mutations: His_{32}→Gly, Ser_{34}→Arg, and Pro_{90}→Ala.

28. (Currently amended) The ~~A~~ fusion protein of claim 33 ~~26~~, wherein the EPO portion ~~EPO$_m$~~ comprises cysteines at positions 29 and 88.

29. (Currently amended) The ~~A~~ fusion protein of claim 28 ~~26~~, wherein the EPO portion ~~EPO$_m$~~ comprises cysteines at positions 29, 33, 88, and 139.

30. (New) A fusion protein comprising an Fc portion of an Ig molecule and an erythropoietin (EPO) portion, wherein (i) the Fc portion is fused covalently via its C-terminus directly or indirectly to the EPO portion, (ii) the EPO portion comprises a Cys substitution at an amino acid position corresponding to Gln_{86}, Pro_{87}, Trp_{88}, Glu_{89}, or Leu_{91} of human erythropoietin, and (iii) the EPO portion retains erythropoietin activity.

31. (New) The fusion protein of claim 30, wherein the EPO portion comprises an amino acid other than cysteine at position 33.

32. (New) The fusion protein of claim 30, wherein the EPO portion is derived from human erythropoietin.

33. (New) The fusion protein of claim 32, wherein the EPO portion comprises Cys at position 88.

34. (New) The fusion protein of claim 33, wherein the EPO portion further comprises at least one of the following amino acid variations: position 29 is not Cys, position 33 is not Cys, and position 139 is Cys.

35. (New) The fusion protein of claim 30, wherein the Fc portion is mutated or truncated in its amino acid sequence.

36. (New) The fusion protein of claim 30, wherein the Fc portion is modified in its glycosylation pattern.

37. (New) The fusion protein of claim 30, wherein the Fc portion is derived from an IgG chain and comprises a mutation of the glycosylation site within the Fc portion of the IgG chain.

38. (New) The fusion protein of claim 37, wherein the mutation is of an asparagine at an amino acid position corresponding to position 297 of IgG1.

39. (New) The fusion protein of claim 30 further comprising a linker between the Fc portion and the EPO portion.

40. (New) The fusion protein of claim 39, wherein the linker has no protease cleavage site.